

Geode (abstract)

Geode is a rhythmic engine for polymetric & polyphasic patterns. This is fundamentally a 'clocked' mode, whether internally or via Teletype. TIME & INTONE maintain their standard free-running influence.

Notes are a combination of a standard trigger along with a repeat count & subdivision. The former sets the number of envelope events to create, while the latter chooses the rhythmic relation of those repeats to the master timebase. *transient* / *sustain* / *cycle* chooses how the repeats' amplitude is modified over time. *sustain* decays to zero-level over the duration of the repeats. *cycle* adds a rhythmic undulation to the envelope level, controlled via the RUN jack. Experiment!

Once these rhythmic streams are moving, their pattern can be locked to a quantize amount. Using odd-subdivisions with even quantize or vice-versa will enable patterns to break out of the evenly-spaced repeat model.

Tick-tock

The timebase for *Geode* can be established through two different uses of one command:

```
JF.TICK clock/bpm
```

- *clock/bpm*: 49 to 255 directly sets tempo to 49-255 bpm
- *clock/bpm*: 1 to 48 define how many ticks equal one measure, sent repeatedly through tap-tempo from Teletype. eg `JF.TICK 4` meaning four notes per measure

```
JF.TICK 0
```

 resets the timebase to the start of the measure.

Look who's talking, as well!

(These movie title references are almost over.)

Cut from the same cloth as *Synthesis*, *Geode* also utilizes `JF.VOX` and `JF.NOTE` in its own tongue. Instead of lush grumbles and glassy tones, *Geode* speaks in streams of rhythmic envelopes on a named channel, dutifully repeating at a rhythm defined by a division of the clock's measure.

```
JF.VOX channel division repeats
```

Create a stream at the specified channel, of defined rhythm and duration.

- *channel*: select the channel (1 - 6) to assign this stream, 0 sets all
- *division*: set the rhythmic division of a measure
- *repeats*: set the number of repeats in the stream, -1 repeats indefinitely

```
JF.NOTE division repeats
```

Dynamic allocation. Assigns the rhythmic stream to the oldest unused channel, or if all channels are busy, the longest running channel.

- *division*: set the rhythmic division of a measure
- *repeats*: set the number of repeats in the stream, -1 repeats indefinitely

Flow

Though streams use *division* to determine their rhythm, events can be queued and delayed using a division of the master timebase. Using a quantization that doesn't align with `JF.VOX` / `JF.NOTE`'s *division* of rhythmic streams will cause irregular patterns to unfold.

JF.QT division

- *division*: 1 to 32 sets the subdivision and activates quantization, 0 deactivates

Think of JF.QT as a performative glue rather than a rigid gridlock. It will slightly affect the timing and 'swing' of events. This is especially wonderful when executing scripts manually or with a fuzz-timed source.

Example: JUNG LOVE

Featured in the banner video above.

Geode is set to *shape/cycle*. *IDENTITY* through 6N are modulating a resonator (Rings), which is processing (and being sequenced in parallel with) a filtered mix of Mangrove's Square and Formant outs.

Scripts 1-7 are triggered from the keyboard. Script 7 randomly assigns a velocity between 3V and 7V to 6N.

Teletype's metronome, which is sequencing the v/8, is bit slower than JF.TICK. JF.VOX commands span even and odd divisions, which JF.QT attempts to wrangle.

Honestly, I'm not even sure what's really going on here. But it's fun.

```
#1
JF.VOX 1 5 2

#2
JF.VOX 2 4 4

#3
JF.VOX 3 3 9

#4
JF.VOX 4 1 9

#5
JF.VOX 5 10 19

#6
JF.VOX 6 2 4

#7
JF.VTR 6 V RRAND 3 7

#8

#M
CV 1 N PN.NEXT 0
CV 2 N PN.HERE
CV.OFF 1 V * 1 TOSS
CV.OFF 2 V * 2 TOSS

#I
JF.MODE 1
JF.TICK 99
JF.QT 6

#P

12 0 0 0
19 0 0 0
3 0 0 0
7 0 0 0
0 0 0 0
```

Reference

OP	Description	nb
JF.TICK x	set x bpm (49 - 255), tap-tempo (1 - 48) or reset (0).	requires JF.MODE 1 , <i>Geode</i>
JF.QT x	quantize events 1-bar/ x (1 - 32), 0 deactivates.	requires JF.MODE 1 , <i>Geode</i>